

Producing accented words without self-listening improves word memory

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Own overt word productions facilitate word recall more than listening to others producing the words (MacLeod, 2011). This production advantage applies both for words with an accent that is familiar to participants, and for words with an unfamiliar accent (Grohe & Weber, 2016). It is still possible, however, that hearing oneself while speaking (self-listening) largely drives the effect. The present study tests therefore whether self-produced words are still better recalled when participants do not hear themselves during production.

Forty (28 female, 12 male) speakers of the Swabian German accent participated. Test words either had a Swabian accent marker that was familiar to participants (/st/ pronounced as [ʃt], Zahnbür[ʃt]e – ‘tooth brush’) or an unfamiliar Northern German accent (/ft/ pronounced as [st], Blumen[st]rauβ – ‘bouquet’). In the initial training phase, words were presented on a computer screen and participants either read the words aloud with the Swabian or Northern German accent marker, or they listened to the words. While producing words, white noise was played over headphones to prevent participants from hearing themselves. After training, participants decided in a visual memory recognition task for individual words from the training phase (old words) and new words with a button press whether each word was old or new. Hit rates were significantly higher for self-produced words than listened-to words ($\chi^2=27$; $p<.001$); this advantage applied to both the familiar and the unfamiliar accent. Thus, the previously found production advantage is a true production effect: production alone improves recall even when the producers do not hear themselves.

References

Grohe, A.-K., & Weber, A. (December 6-9, 2016). Speaking aloud improves recall for words with familiar and unfamiliar accents. Poster presented at the *16th Australasian Conference on Speech Science and Technology*, Sydney, Australia.

MacLeod, C. M. (2011). I said, you said: the production effect gets personal. *Psychonomic Bulletin & Review*, *18*(6), 1197–1202.